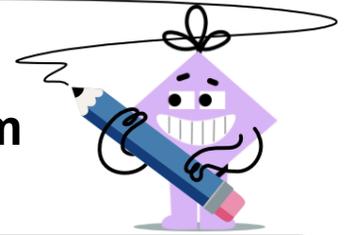




## Trigonometry - Calculating Angles from Ratios (-1 Notation)



**1** Calculate the angle in degrees, given the trigonometric ratio

$$\cos^{-1}(0.809) = \alpha$$

A	B	C	D	E	F
$\alpha = 21^\circ$	$\alpha = 36^\circ$	$\alpha = 16^\circ$	$\alpha = 56^\circ$	$\alpha = 51^\circ$	$\alpha = 46^\circ$

**2** Calculate the angle in degrees, given the trigonometric ratio

$$\cos^{-1}(0.731) = \alpha$$

A	B	C	D	E	F
$\alpha = 33^\circ$	$\alpha = 48^\circ$	$\alpha = 63^\circ$	$\alpha = 43^\circ$	$\alpha = 58^\circ$	$\alpha = 38^\circ$

**3** Calculate the angle in degrees, given the trigonometric ratio

$$\cos^{-1}(0.921) = \alpha$$

A	B	C	D	E	F
$\alpha = 23^\circ$	$\alpha = 13^\circ$	$\alpha = 38^\circ$	$\alpha = 18^\circ$	$\alpha = 8^\circ$	$\alpha = 43^\circ$

**4** Calculate the angle in degrees, given the trigonometric ratio

$$\tan^{-1}(0.268) = \alpha$$

A	B	C	D	E	F
$\alpha = 0^\circ$	$\alpha = 25^\circ$	$\alpha = 20^\circ$	$\alpha = 10^\circ$	$\alpha = 15^\circ$	$\alpha = 5^\circ$

**5** Calculate the angle in degrees, given the trigonometric ratio

$$\tan^{-1}(1) = \alpha$$

A	B	C	D	E	F
$\alpha = 50^\circ$	$\alpha = 60^\circ$	$\alpha = 40^\circ$	$\alpha = 55^\circ$	$\alpha = 25^\circ$	$\alpha = 45^\circ$

**6** Calculate the angle in degrees, given the trigonometric ratio

$$\tan^{-1}(1.881) = \alpha$$

A	B	C	D	E	F
$\alpha = 52^\circ$	$\alpha = 57^\circ$	$\alpha = 42^\circ$	$\alpha = 67^\circ$	$\alpha = 62^\circ$	$\alpha = 47^\circ$

**7** Calculate the angle in degrees, given the trigonometric ratio

$$\cos^{-1}(0.719) = \alpha$$

A	B	C	D	E	F
$\alpha = 59^\circ$	$\alpha = 39^\circ$	$\alpha = 54^\circ$	$\alpha = 64^\circ$	$\alpha = 29^\circ$	$\alpha = 44^\circ$

**8** Calculate the angle in degrees, given the trigonometric ratio

$$\cos^{-1}(0.766) = \alpha$$

A	B	C	D	E	F
$\alpha = 25^\circ$	$\alpha = 60^\circ$	$\alpha = 50^\circ$	$\alpha = 45^\circ$	$\alpha = 40^\circ$	$\alpha = 35^\circ$